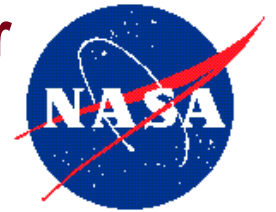


Integral Stirling and Joule-Thomson Cryocooler for Low Temperature Applications

Stirling Technology Company
Kennewick, WA



INNOVATION

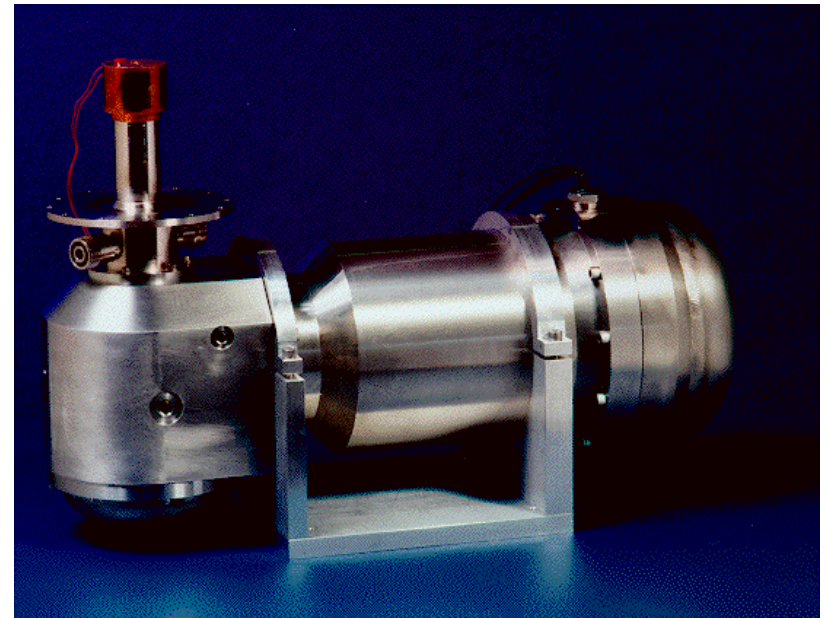
A long life, low temperature (cryogenic) cooling system for electronic devices and sensors.

ACCOMPLISHMENTS

- ◆ Utilizes unique free-piston flexural bearing technology and linear drive motor concepts.
- ◆ Designed with multiple configuration options to provide flexibility in net cooling capacity.
- ◆ Derivatives of this design incorporate single and multi-stage Stirling cycle and pulse tube configurations.
- ◆ Use of flexural bearings and non-contacting clearance seals ensure high reliability and low maintenance.

COMMERCIALIZATION

- ◆ Negotiations beginning with other domestic and international companies for derivatives of the BeCOOL™.
- ◆ Projected sales will exceed \$25M annually in 4 years, and employment is expected to increase by 50.
- ◆ Sales continue in many areas.



BeCOOL™ High Capacity Linear Drive Cooler

GOVERNMENT/SCIENCE APPLICATIONS

- ◆ High performance computer cooling
- ◆ High temperature superconductive devices for cellular communication systems
- ◆ Environmental monitoring equipment
- ◆ Laboratory and medical instrumentation
- ◆ Other applications where liquid nitrogen is required for cooling

Points of Contact:

- NASA - Max Gasser; 301-286-8378
- Stirling Technology - Tom Mitchell; 509-735-4700